

IN THE CLAIMS:

1-12 (cancelled).

13. (previously presented): An arrangement for directly controlling the movement of a zoom system in a stereo microscope, comprising:

direct driving motors in the stereo microscope for at least one moving lens system wherein the driving motors are controlled by a control unit which reads calculated pre-stored values of reference points from a mathematical controlling curve for directing the movement of the at least one moving lens system by controlling the driving motors in a corresponding manner without necessitating use of mechanical generation of the mathematical controlling curve.

14. (previously presented): The arrangement according to claim 13 with two lens members which comprise the at least one moving lens system and are controlled independently from one another.

15. (previously presented): The arrangement according to claim 13, wherein lens members which comprise the at least one moving lens system and are provided as lens pairs in a Greenough type stereo microscope or telescope type stereo microscope.

16. (cancelled).

17. (previously presented): The arrangement according to claim 13, wherein the driving motors are linear drives.

18. (original): The arrangement according to claim 17, wherein the linear drives are arranged in the stereo microscope housing.
19. (previously presented): The arrangement according to claim 18, wherein the driving motors are arranged between lens pairs which comprise the at least one moving lens system.
20. (previously presented): The arrangement according to claim 13, wherein a plurality of moving lens members which comprise the at least one moving lens system and are controlled jointly.
21. (previously presented): The arrangement according to claim 13, wherein at least two lens members which comprise the at least one moving lens system are driven separately.
22. (previously presented): The arrangement according to claim 13, wherein a linear magnification that is adjusted is determined and displayed during the controlling of the zoom system.
23. (previously presented): The arrangement according to claim 13, wherein at least one control unit is used for motorized zoom adjustment and for motorized focusing of the microscope.
24. (cancelled).

25. (New) An arrangement for directly controlling the movement of a zoom system in a stereo microscope, comprising:

at least one pair of movable lenses for stereo imaging and operable to move in a non-parallel manner with respect to each other;

direct driving motors arranged in the stereo microscope and operable to move the pair of movable lenses;

a memory that stores values of calculated reference points that represent a mathematical controlling curve for directing movement of the pair of movable lenses; and

a control unit which reads the stored values from the memory and control the direct driving motors in a corresponding manner without using mechanical generation of the mathematical controlling curve and without using any feedback with respect to the position of the direct driving motors.